

Financial Procrastination: Assessing Wealth Indecision and Avoidance with a Self-Report Scale

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ABSTRACT – Identifying and understanding *financial procrastination*, chronic avoidance or delay in wealth management, might assist individuals and financial professionals develop strategies to promote better financial decision-making. We developed a self-report scale to measure financial procrastination with 753 adults (442 men, 311 women; *M* age = 44 years old) through convenient sampling from northern India. We randomly distributed participants into two sub-samples for exploratory factor analysis (EFA; *n* = 372) and confirmatory factor analysis (CFA; *n* = 381), to test reliability and convergent validity. EFA and CFA results revealed a two-factor structure of a short 9-item reliable financial procrastination scale, namely: 4 items on *financial avoidance* (avoidance behavior related to financial matters; $\alpha = 0.86$), and 5 items on *financial indecisiveness* (irrational delays in making financial decisions; $\alpha = 0.84$). Results demonstrated good reliability and validity. This new scale may contribute significantly to individual difference literature measuring financial procrastination.

Keywords:

Financial procrastination;
Indecisiveness; Avoidance; India

Received: October 18, 2025

Accepted: October 30, 2025

Published: January 14, 2026

Citation:

Ferrari, J.R., Garg, N., & Singh, S. (2026). Financial procrastination: Assessing wealth indecision and avoidance with a self-report scale. *Individual Differences Research*, 24(1), e24001.
<https://doi.org/10.65030/idr.24001>

Introduction

Procrastination is expressed as a focused voluntary delay in initiating or finishing a task, and, waiting for the last minute or after the fixed deadline for task focus, and delay that would have been preferably accomplished in the present time (Ferrari et al., 1995; Ferrari, 2010).

According to Ferrari (cf., 2010; Ferrari & Tibbett, 2017), procrastination may be considered an avoidance response to produce current relief from perceived stress that seems to yield instant gratification, often escaping thinking (and its anxiety) of performing a challenging, important tasks. It is a self-handicapping strategy (see Ferrari & Tice, 2000). In fact, studies report that persons who procrastinate often may face harmful consequences for postponement that may be connected to diminished well-being and worse emotional health (Sirios, 2007). Ferrari and colleagues (Ferrari et al., 2018; Gorshit et al., 2018; Tibbett & Ferrari, 2018) examined the major life domains of procrastination like health, career, education, family, leisure, and finance. Across cultures and samples, they noted that procrastination in life domains, including financial matters, is quite common among the people across the globe leading to regret for inaction. In fact, one might say procrastination may be characterized as the “thief of money” when it comes to saving and investing.

The current study explored the concept of *financial procrastination*. That is, financial procrastination that may occur when a person delays decisions in monetary matters on a continuous basis and is irrational to do so, resulting in future financial obligations detrimental to financial health. We viewed financial procrastination as irrational delay on financial matters in relation to personal finances. Focusing on procrastination in this domain of life is an emerging area of interest (see Ferrari & Tibbett, 2017). However, there seems to be no published reliable and valid self-report scale to measure financial procrastination.

While many people procrastinate, they face harmful consequences for postponement (see Ferrari, 2010), and we believe the harm extends to personal finances. For instance, there is an opportunity cost with each decision, and money has “time value.” Prudent investment decisions made on time yield good returns on investments, instead of putting off such financial decisions till tomorrow. Financial procrastination poses a real challenge to wealth management. Developing a self-report measure may be useful for assessing financial well-being and creating effective interventions to promote responsible financial decision-making. It should be noted that useful self-report, research measures already exist on decisional and chronic behavioral procrastination (see Ferrari et al., 1995, for the items and the psychometric properties of these measures). However, these reliable and valid most often scales do not target wealth and financial matters. Consequently, we believe a new instrument on financial procrastination assessing decisional and behavioral financial procrastination (useful for understanding behavioral economics) is lacking. The present study aimed to fill that void. We focused on the cognitive aspect of financial planning, exploring (like decisional procrastination measures) financial indecision. In addition, we wanted to ascertain action-based, behavioral procrastination (like chronic procrastination measures) focused on financial avoidance.

Financial Indecisiveness

Financial indecisiveness exhibits irrationally delaying, often resulting in procrastinating on financial decisions regarding investments of funds on a timely basis for optimal returns. Financial decisions are particularly prone to procrastinatory behavior, because these decisions may be complex and require behaviors viewed as daunting (Ferrari et al., 1995; Ferrari, 2010). Wahyuni and Tan (2016) investigated factors influencing investment decision-making of retail investors in Indonesia from a behavioral finance perspective. Results showed that most investors feared failure from poor planning and investing. Fears of failure, and success, have

been found to be components of decisional procrastination, called indecision (Ferrari & Dovidio, 2000; 2001; cf., Ferrari 2010 for details). Ferrari et al. (2017) studied the different contextual factors in relation to indecisiveness and taken together these studies on indecision reported correlates with a variety of personality aspects. We believe decisional procrastination (indecision) may be reflected in several life areas like bill payments, investing, and savings matters (Ferrari, 2010). In turn, indecision with financial matters is likely yet another cognitive area reflecting decisional procrastination.

In advanced, westernized countries, the number of retirees has increased dramatically, while numerous macroeconomic features have cast a cloud of ambiguity over the medium to long-term reliability of community annuity programs (Clark & Newhouse, 2016). Additionally, the obligation of government and employer for retirement pension facility has shifted onto the individual investor (Catalán et al., 2010; De la Fuente & Doménech, 2013; Lytle et al., 2015). Consequently, it has become even more significant to plan financially for retirement and one's future to ensure a sufficient level of guaranteed income is available to meet personal expenses and requirements. Hershey et al. (2013) projected a method for financial planning based on an individual's capability, preparedness, and chance to strategies in advance and save. This model is accepted by most financial planning experts (see Leandro-França et al., 2016; Hershey & Mowen, 2000; Jacobs-Lawson & Hershey, 2005). It also revealed that the connections between financial acquaintance and saving behavior are facilitated by other variables (Boisclair et al. 2015). For instance, personality characteristics may stimulate financial planning for retirement (Agarwal, et al., 2015, Indapurkar et al., 2024). Benartzi and Thaler (1995) noted that newly employed personnel at the devoted somewhat insufficient time in relation to their retirement investment decisions. Loewenstein et al. (1998) examined several retired persons who reported remorse over their indifferent attitude towards evaluating the options for making investment decisions for superannuation planning. They also found that a that large number of these individuals did not make investment decisions wisely. O'Donoghue and Rabin (1999) discussed how individuals habitually make illogical choices due to numerous reasoning inaccuracies and behavior prejudices. Any procrastination, for instance, on transfer of money from saving account to sweep-in-account often leads to loss of interest. In these uncertain times, only emergency savings will provide security to the person and his family (Tam and Dholakia, 2012). Taken together, the literature suggests that indecisiveness in finances has detrimental personal effects. Thus, it is important to ascertain determinants of financial indecision.

Financial Avoidance

Financial avoidance may be defined as unreasonably postponing “till the last minute” the evaluation and action on important financial matters associated with future obligations: in essence, connecting to financial procrastination. A number of studies reported the negative consequences from financial avoidance. For instance, Frankham et al. (2020) showed how psychological factors negatively affected financial hardships. In fact, Kim and You (2019) noted that late bill payments were related to increased risk of suicidal behavior. Goyal et al. (2021) examined antecedents of personal finance management and found that recklessness (impulsivity) at the last moment often occurred. Barrafreem et al. (2020) noted that a pessimistic approach for the future decreased financial health and mental health. Jurich et al. (2020) examined how behavior aspects affected trade efforts and investing behavior. Other

researchers noted that poor financial preparation negatively impacted retirement planning (Vieira et al., 2022) and often reflects the investor's attitudes toward wealth management with poor planning (Spinella et al., 2007). Poor planning or avoidance of financial wealth leads to low to minimal investment returns (Gneezy & Potters, 1997; Ali et al., 2017). Together, these studies suggest the necessity for assessing individual differences in financial avoidance.

Furthermore, financial avoidance has led to postponing one's annual taxes, resulting in high fines (Swistak, 2016). Individual differences also emerge in financial avoidance, such that some people actively track their bank accounts to avoid paying their required government taxes (Zucman, 2014), and others avoid switching one's loan to lower interest rates even when beneficial for the borrower over the entire period of the loan (Singh, 2019). Annual charges of debit and credit cards linked to financial avoidance also carries financial burden. For example, late payments of credit card bills or paying minimum amounts of credit card bills affect financial behaviors of a person (Allgood & Walstad, 2011). Many individuals maintain bank accounts which they have not used in a long time, incurring delinquent charges by the banks harming the account holders' balance (Motlhabane, 2017). In summary, we believe that assessing individual differences in financial avoidance may be a factor which explains procrastination in financial matters. Given that psychologists explore individual differences with correlates and causes of chronic procrastination (see Ferrari et al. 1995; Ferrari, 2010), we believe assessing financial avoidant behavior is another assessment of situational procrastination.

Method

Participants

The total final respondent sample consisted of 753 respondents (442 men, 311 women; M age = 44.0 years old, $SD = 8.6$), who self-reported they were gainful employment. Initially, data from 804 respondents was collected in northern India, but 25 cases with many items missing were removed. Further, 5 unengaged responses were removed from the data. The distribution of data was examined, resulting in 21 cases of extreme outliers removed from the data set resulting in the final participant set of 753 individuals

Procedure: Scale Development

The scale was developed based on standard steps described by Metin et al. (2016). We initially generated 66 items but paired down logically to 21 items each using a 7-point response scale (1 = *strongly disagree*; 7 = *strongly agree*) based on a definition of procrastination as irrational delay (see Ferrari et al., 1995; Ferrari, 2010) but with face validity and culturally free as related to financial matters. For instance, "*I consciously delay my investment decision till the market improves but end up with poor returns*," "*I keep assessing all my investments to get more returns on them*." The item pool was designed by item stems from Steel (2010). Then, three experts from the finance field and two from the psychology field gave their assessment regarding the items. Only 15 items were retained to measure financial procrastination. Subsequently a pilot study was conducted with these 15 items ($n = 120$), and the internal consistency across items was satisfactory (Cronbach alpha = 0.80). Still, as suggested by respondents, items were adjusted with respect to wording. Finally, factorial structure was examined with EFA and CFA exploring both financial indecision and financial avoidance to further reduce the item pool to a total of 9 items each rated on a 7-point Likert scale noted

above. Data collection was consistent with APA ethical standards and institutional IRB guidelines.

The sample for the present study was collected online from convenience samples from 2 states in India – Punjab and Himachal Pradesh, and 2 union Indian territories (UT), namely: Chandigarh and Delhi. Both states are culturally and geographically different from each other. We ensured that the number of respondents per area was similar, to prevent over sampling from one region over another. It took respondents 10-12 minutes to complete the 21-item pool of self-report questions, and data were collected for 7-8 weeks. Items were presented in counter-balanced order during evaluation to control for order effects.

Results

Factor Analysis of The Financial Procrastination Scale

Exploratory factor analysis (EFA) with *varimax rotation* explored the factorial structure of created financial procrastination scale. To apply EFA, 372 respondents were selected randomly from the total sample, yielding 220 men and 152 women (M age = 43.6 years; SD = 8.3). Results yielded a KMO value of 0.89, exceeding minimal criteria indicating sampling adequacy (Alavi et al. 2020). Bartlett's Test of Sphericity also was significant, $\chi^2 = 2484.09$, $p < 0.05$, ensuring that the items had a minimum level of correlation. A principal component analysis with *varimax rotation* suggested a two-factor solution was the best fit for the data, explaining 63.8% of the common variance with eigen values greater than 1.0 and factor loadings of 0.65 or greater. Factor 1 contained four items, with an eigenvalue of 5.45 explaining 33.05% of the variance and a Cronbach alpha of 0.86. We labelled this factor *financial avoidance*, since it focused on an individual not engaging in wealth management behaviors that would produce financial gains. The second factor contained five items, with an eigen value of 2.21 explaining 30.81% of the variance with a Cronbach alpha of 0.84. We labelled this factor *financial indecision*, focused on not deciding or postponing decisions around wealth management for immediate and long-term timelines. Together, we believe we created a 9-item, reliable short scale.

Confirmatory factor analysis subsequently was applied to validate the two-factor structure. A sub-sample of the full set of respondents were used for our CFA, yielding 381 respondents (222 men; 159 women; M age = 44.3 years; SD = 8.9). It was run by using covariance-based SEM as the best choice for testing the hypotheses and predicting the effects (Byrne, 2016) with AMOS 18 software. The EFA suggested two factors explaining most of the common variance. CFA results exhibited that two-factor solution model also was better than one-factor model, χ^2 a-b = 656.24, $p < 0.001$. The significant difference of χ^2 between two models also established the discriminant validity of two dimensions. That is, a comparative analysis of model fit indices indicated that the final CFA model was the best fit, NFI= 0.95, GFI = 0.95, CFI =0.95, RMSEA = 0.06. As per threshold value of the model fit for goodness of fit index should be more than 0.90; and RMSEA value should be less than 0.08 (Byrne, 2016). Thus, the two-factor model was significantly superior and best fit for this data. Table 1 contains both financial avoidance and financial indecision sub-scale items of the newly created *Financial Procrastination Scale*.

Confirming Dimensionality

Furthermore, we examined the convergent validity of the constructs with average variance extracted (AVE). With the threshold value of AVE of 0.50 (Henseler & Schuberth, 2020), results indicated that both constructs (i.e., *financial avoidance*, *FA*, and *financial indecision*, *FI*) had values greater than those of AVE ($FA = 0.59$; $FI = 0.54$). Also, reliability of both factor constructs suggested good internal consistency (FA Cronbach alpha = 0.86; FI Cronbach alpha = 0.84). Finally, the indicator (item) reliability was assessed, with a minimum 0.60 value (see Hair et al., 2020). Results showed reliability on the subscales (FA composite reliability = 0.87; FI composite reliability = 0.85), indicating they were not affecting AVE value of the constructs.

Table 1: The Financial Procrastination Scale

Items
<i>Financial Avoidant (FA) subscale</i>
1. I keep assessing all my investments to get more return on them.
2. I do not bother to avail the credit facilities from some other source at a lower rate of interest while paying more interest for the same. (R)
3. I do not often reschedule my credit card dues to avoid penal interest. (R)
4. I generally file my income tax return near the closing date and plan to pay the necessary tax only at the last moment.
<i>Financial Indecision (FI) subscale</i>
5. I have not yet planned to create the retirement fund.
6. I have deliberately held up my investment decisions to supplement my current income.
7. I keep on postponing my financial investment decision in order to seek the expert advice of a professional on the matter.
8. I put off my investment decision until the market improves but I lose the opportunity of making returns.
9. I consciously delay my investment decision till the market improves but end up with poor returns.

Note: R = reverse score

Testing Invariance or Equivalence of Scale in Different Cultures

Of course, a valid self-report scale frequently is to be free from cultural biases; scale items should be translatable to another language. To check the effect of cultural biasness on our new scale, multigroup analysis was performed and different types of invariances were examined. As noted, the data were collected from two states in with an equal number of union territories from the northern region of India. More specifically, sample sizes included 164 respondents from the Punjab state, 184 from Himachal Pradesh, 121 from Chandigarh, and 188 from Delhi. Both the Punjab and HP states have a different cultural identity, and spoken languages are also different. Moreover, both the states are geographically different as most of the area in HP is mountainous, whereas Punjab has flat region. In contrast, both the UTs are similar because of their culture and preferred language, i.e., Hindi. However, the culture of UTs is different from that of the states under investigation. Consequently, the two different samples from UTs

were combined into one sample of 368 respondents. While considering all these factors, the scale was compared across the three samples, namely: HP, Punjab, and UTs.

Multi-group analysis (MGA) provided a hierarchy of models by assigning constraints on different levels (Marsh & Butler, 1984; Marsh & Bryne, 1993). A baseline model examined without assigning any constraint on any parameter showed reasonably fit ($\chi^2 = 256.373$, GFI = 0.928, CFI = 0.952, TLI = 0.947, NFI = 0.925, RMSEA = 0.04). Next, an invariant model of constraint factor loading (measurement weights) across groups also indicated a good fit model. All model fit values of GFI, CFI, NFI, and TLI were greater than 0.90; and RMSEA was 0.045. Comparing this higher model with the base model $\Delta \chi^2$, a difference of 3.37 was not significant, $p > .05$). But the difference between Δ CFI was not greater than 0.001 between two models and across the groups. Thus, results confirmed equivalence of factor loadings across all culturally diverse Indian groups.

In addition, factor loadings and correlations were constrained and this estimated model was compared with baseline model. The χ^2 difference was significant, $p < .01$. But, between the base model and this model, Δ CFI was 0.001 and the model was quite fit, $\chi^2 = 279.79$, GFI = 0.928, TLI = 0.948, NFI = 0.919, CFI 0.954. Finally, two steps confirmed that invariance between factor loadings and correlations was identifiable. Here, in this model we constrained factor loadings, correlations, and measurement residuals, and the hierarchy model was a reasonable fit, $\chi^2 = 279.79$, GFI = 0.916, TLI = 0.947, NFI = 0.911, CFI 0.943, RMSEA = 0.47. The χ^2 difference between this last model and the base model was not significant, $p > .01$. In sum, overall model fit indices were quite strong indicating support for intra-cultural regional invariance across diverse groups (Netemeyer et al., 1996).

Discussion

Retirement planning as well as lifestyle investment is of utmost significance in an individual's lifetime. Procrastination in financial matters adversely affects the health/wealth of individuals and their personal relationships. Results of the present study provide a reliable, useful new self-report scale of financial procrastination. We proposed financial procrastination composed of two factors, labelled *financial indecisiveness* and *financial avoidance*. Financial indecisiveness explained a tendency toward irrational delay in financial matters, consistent to the construct proposed by other literature (i.e., Benartzi & Thaler 1995; O'Donoghue & Rabin 1999). Financial avoidance reflected a tendency to be ignorant of financial matters, which is reflected by previous literature (see Leandro -Franca et al., 2016; Hershey & Mowen, 2000; Jacobs-Lawson & Hershey, 2005). By creating a useful self-report measure it may be possible for scholars to explore reckless spending habits or incapacity to manage finances properly in daily life which some people experience (Rai et al., 2024). Ferrari (2010) reported that common by procrastinators are postponement of the payments such as delays in paying utility bills, depositing the credit card dues on time, delay in filing taxes or legal compliances and further lingering on the financial planning decision for instance, delays in creating retirement fund for old age, estate planning by not executing will at proper time and so forth. Our new scale enables researchers and practitioners to ascertain financial procrastination as a significant relevant concept. Thus, the study has made a unique contribution.

Limitations and Future Directions

The present study, of course, has limitations. For instance, we did not focus on a specific group for sample size, despite insuring residents from different states and territories in northern India obtained through convenience sampling method. The scale has been used in one country, and may not (unlikely, but possible) apply to western and non-western nations. We propose that future research use this new scale to explore the causes and consequences of financial procrastination across varied cultures, ascertaining a global perspective of delays in wealth management. This new self-report scale might be replicated with varied cultural groups and individuals, such as investors and household wealth management leaders. Financial procrastination also might relate to constructs such as financial self-efficacy, conscientious, well-being, prudence, etc. Individual differences in financial procrastination might impact one's health, stress, or personality. Nevertheless, this new self-report scale seems to be a useful tool to assess financial procrastination tendencies.

Author Note: We thank those persons who volunteered to complete the scale.

Conflicts of Interest: The authors declare no conflicts of interest.

Funding: This research received no specific funding.

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